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EXAMINER

MOTTOLA, STEVEN J

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

093870

Applicant(s)

Tani et al.

Examiner

MOTOLA

Group Art Unit

2817

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on April 30, 2003.
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-18 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☒ Claim(s) 1-7, 11-12, 15-17 is/are allowed.
- ☒ Claim(s) 8-10, 13-14, 18 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 2817

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8-10, 13 and 18 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims specify "a channel width varying circuit"; however, an actual circuit that physically varies the channel width of a transistor is not disclosed. Regarding the argument presented against the rejection of claims 8-10 and 13, the circuits of figs. 5-6 show a composite transistor consisting of a plurality of transistors which may be selected to effectively vary the channel width of the composite transistor; however, the physical channel width of a (singular) transistor is not actually varied in this manner. By way of suggestion, taking claim 13 as an example, the word --composite-- could be inserted before "transistors" and "transistor" on line 2 and --an effective-- could replace "a" on line 5 and --the effective-- after "varies" on line 5. Regarding new claim 18, the applicant has argued that this claim is supported at page 28, line 22 to page 29, line 2 of the specification; however, this passage refers to fig. 5 showing the current source structure. The bias voltage supplied to it,  $N_{bias}$ , is not switched. Since claim 18 depends from claim 14, the bias voltage must be regarded as the bias voltage applied to the current source.

Art Unit:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Lee.

Refer to fig. 5 the description of which begins at col. 4, line 7 of the disclosure of Lee. A circuit 31,51 having a plurality of transistors Q1-Q3 is disclosed including a current source transistor Q1. A circuit 52 supplies a reference signal that is used to generate a bias for the current source transistor and may thus be read as the bias generating circuit claimed. Circuit 32 applies gain to the signal and may be read as the bias voltage adjusting circuit claimed. Regarding the term 'operational amplifier', this appears only in the preamble and could be regarded as an intended use of the claimed circuitry since a complete op amp is not set forth. Note that the circuit of Lee is a differential amplifier.

Regarding the argument made against the rejection, the circuit 32 has above been read on the adjusting circuit, not the generating circuit which has been read on circuit 52.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


Art Unit:

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Claims 1-7, 11-12 and 15-17 are allowed. These claims specify a design methodology for operational amplifiers not disclosed in the prior art of record including varying the channel widths of a plurality of transistors by different factors among different sets of op amp layout information. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Mottola whose telephone number is 703-308-4914. The examiner can normally be reached on M-Th from 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Pascal, can be reached on (703) 308-4909. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6251.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
Steven J. Mottola  
Primary Examiner